# **Loss Mitigation Grant Program Wind Resistive Device (WRD) Product Evaluation**

The product as described herein has been evaluated by the Department of Commerce and Consumer Affairs (DCCA) for compliance with the technical requirements for wind resistive devices installed in single or multi-family residential dwellings. Installation costs of approved products are partially reimbursable under the provisions of the Loss Mitigation Grant Program. The results of the product evaluation are presented in the following report.

# 1.0 Product Information

#### 1.1 Product Name:

0.050" Solid Bertha Aluminum Storm Panel Shutter

# 1.2 Description:

0.050" Solid Bertha Aluminum Storm Panel Shutters are aluminum panels designed to be temporarily mounted on an exterior wall, covering all glazed openings. These panels are attached either along a track or flush against the wall. They are typically fastened with wing nuts and designed to provide impact and wind load protection.

#### 1.3 Category:

Submitted for evaluation as a WRD option 3- Exterior opening protection

#### 1.4 Submitted By:

All Island Rollshutter LLC 555 Paiea Street Honolulu, HI 96819 Ph: (808) 833-3355

#### a. Manufacturer:

Eastern Metal Supply 4268 Westroads Drive West Palm Beach, FL 33407 <u>bfeeley@easternmetals.com</u>

# b. <u>Technical Representative:</u>

Bill Feeley <u>bfeeley@easternmetals.com</u>

#### c. Local Sales Representative:

Gordon A. Alexander All Island Rollshutter LLC 555 Paiea Street Honolulu, HI 96819 Ph: (808) 833-3355

# 2.0 Product Evaluation

# 2.1 Wind Loads:

No test data has been submitted. However Miami-Dade, Notice of Acceptance (NOA) No. 05-0926.03, approval indicates static and cyclic load capacities in excess of the requirements of the WRD loss mitigation grant program.

# 2.2 Impact Resistance:

No test data has been submitted. However Miami-Dade, Notice of Acceptance (NOA) No. 05-0926.03, approval indicates a Missile Impact rating of D. This exceeds the requirements of the WRD loss mitigation grant program.

# 2.3 **Installation:**

0.050" Solid Bertha Aluminum Storm Panel Shutters are to be installed in accordance with the manufacturer's published installation instructions, engineering drawings and this report.

The manufacturer's published installation instructions and this report shall be strictly adhered to and a copy of these shall be available at all times on the job site during installation

# 2.4 **Substantiating Data:**

- a. Drawing Number 05-078, Eastern Metal Supply, Inc., 0.050" Bertha Storm Panel, sheets 1 through 15 of 15, prepared by Tilteco, Inc., Dated 4/28/2005, signed and sealed by Walter A. Tillit Jr., P.E. (FL License No. 44167)
- b. Drawing Number 02-270, Eastern Metal Supply, Inc., 0.050" Bertha Storm Panel, sheets 1 through 9 of 9, prepared by Tilteco, Inc., Dated 9/8/2005, signed and sealed by Walter A. Tillit Jr., P.E. (FL License No. 44167)
- c. Miami-Dade County, Building Code Compliance Office Notice of Acceptance (NOA) No. 05-0926.03, Approval Date: 07/13/2006, Expiration Date: 08/07/2008

# 3.0 Findings

Evaluation in review of the submitted data indicates that the 0.050" Solid Bertha Aluminum Storm Panel Shutters as described in this report do conform to the requirements of the loss mitigation grant program and are an acceptable WRD for use on window, door, and sliding glass door glazed openings for masonry construction only.

No anchorage details or test results have been provided for single wall construction common to Hawaii. Additional data must be submitted for WRD approved use on this construction type.

For double wall construction the drawings clearly specify all wood members to be Southern Yellow Pine. Hawaii construction primarily utilizes Douglas Fir. For WRD acceptance, provide substantiation for an alternative connection schedule for attachments to Douglas Fir wood members.

# 3.1 Limitations:

- a. 0.050" Solid Bertha Aluminum Storm Panel Shutters as an approved WRD product for use on masonry construction only.
- b. 0.050" Solid Bertha Aluminum Storm Panel Shutters must be installed in accordance with the installation instructions in this report and the manufacturer's published installation instructions.

Gary Y. K. Chock, S.E. Product Examiner June 13, 2007